

We are What We Eat

Diet Therapy -

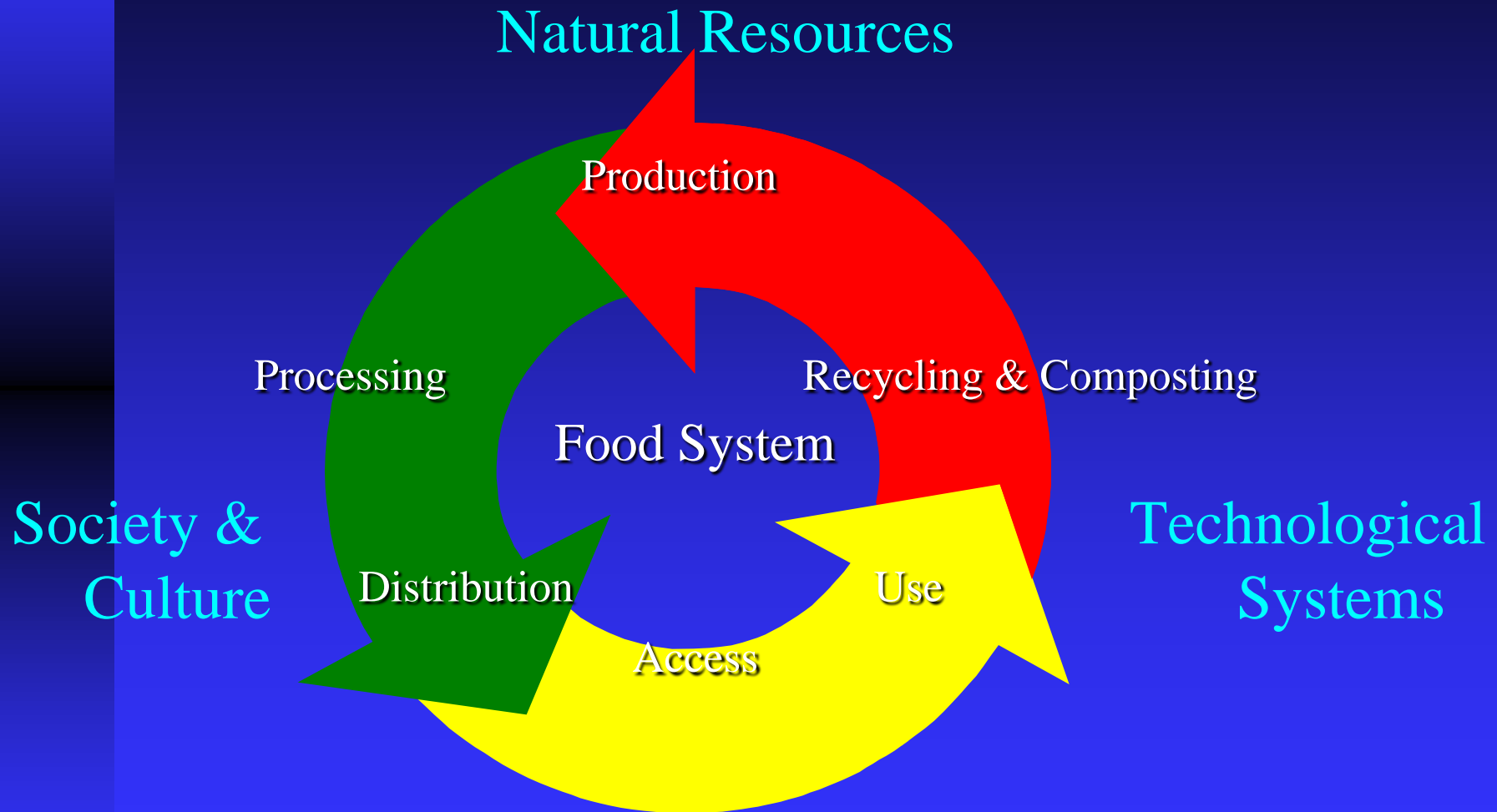
A Strong Support to Family Physicians

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“What is a food system?”

----- Government/Public Policies -----



Adapted from: Dahlberg, K. Local and regional food systems. A key to healthy cities. Available at: <http://homepages.wmich.edu/~dahlberg/F14.pdf>

Sustainability

“Society’s ability to shape its economic and social systems to maintain both natural resources and human life.”

Source: Position of the American Dietetic Association: Addressing world hunger, malnutrition, and food insecurity. *J Am Diet Assoc* 2003;103:1046-1047.

Summary of key trends threatening the sustainability of the US food system (cont'd)

	Economic	Social	Environmental
Consumption	<ul style="list-style-type: none">-Costs of diet-related diseases increasing	<ul style="list-style-type: none">- Obesity rates rising- Diet deviates from nutritional recommendations	<ul style="list-style-type: none">- 26% of edible food wasted

Source: Heller, M.C., Keoleian, GA. Assessing the sustainability of the US food system: A life cycle perspective. *Agricultural Systems* 2003;76:1007-1041

The Industrial Food System & Public Health

- Pollution from factory farms is harming the health of both workers and residents living downstream or downwind from these operations.
- New strains of foodborne pathogens (e.g., *Listeria* & toxigenic *E. coli*) have emerged in recent years, and long recognized pathogens have been causing more widespread harm
- The non-medical use of antibiotics in animal agriculture may be threatening the effectiveness of antibiotics in treating human disease by creating selective pressure for the emergence of antibiotic resistant bacteria

Source: Horrigan, L, Lawrence, RS, Walker, P. How sustainable agriculture can address the environmental and human health harms of industrial agriculture. *Environmental Health Perspectives* 2002;110(5):445-456.

The Industrial Food System & Public Health

- For more information, see the following American Public Health Association (APHA) Resolutions:
 - 1) *Helping Preserve Antibiotic Effectiveness by Stimulating Demand for Meats Produced without Excessive Antibiotics* (Policy Number: 2004-13)
<http://www.apha.org/legislative/policy/2004/2004-13.pdf>
 - 2) *Precautionary Moratorium on New Concentrated Animal Feeding Operations* (Policy Number: 20037)
<http://www.apha.org/legislative/policy/2003/2003-007.pdf>

Sustainable Agriculture

“Sustainable agriculture is a model of social and economic organization based on an equitable and participatory vision of development which recognizes the environment and natural resources as the foundation of economic activity.”

Madden, JP, Chaplowe, SG, eds. *For All Generations: Making World Agriculture More Sustainable*. Glendale, CA: World Sustainable Agriculture Association; 1997.

Community Food System

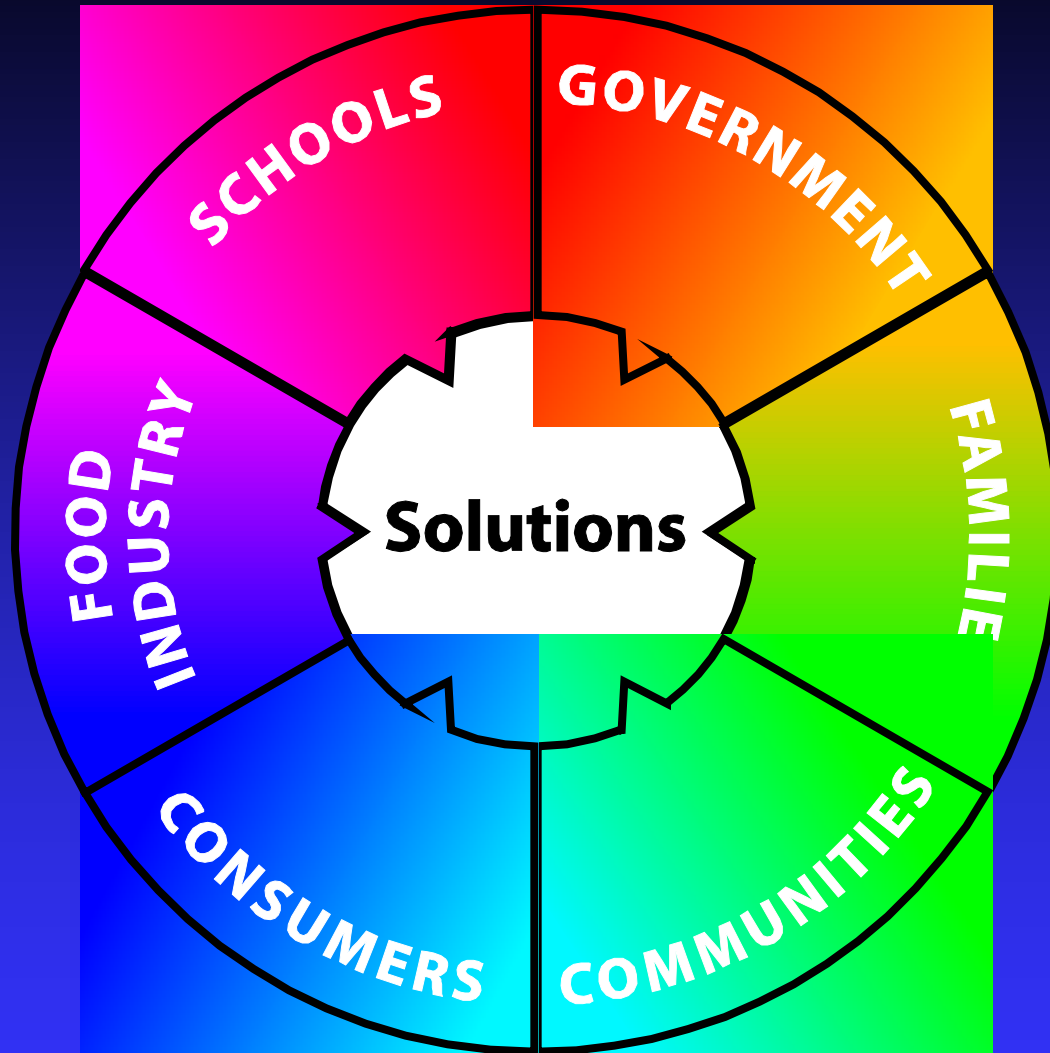
“A collaborative effort to build more locally-based, self-reliant food economies – one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental, and social health of a particular place.”

Source: Feenstra, G.W. Creating space for sustainable food systems: Lessons from the field. *Agriculture and Human Values* 2002;19:99-106.

3-Stage Continuum to Improve Nutrition and Health Based on a Food Systems Approach

- Stage 1: Initial Food Systems Change
- Stage 2: Food Systems in Transition
- Stage 3: Food Systems Redesign for Sustainability

Adapted from: McCullum, C., Desjardins, E, Kraak, V. et al. Evidence-based strategies to build community food security. *J Am Diet Assoc* 2005;105(2):278-283.



Individual Action

- Product Reformulation and Development
- Business Practices
- Wellness and Education Programs



Kraft Foods

- Developing an array of healthier products:
 - Nabisco 100 calorie packs
 - Numerous trans fat free products
 - *CarbWell* salad dressings
 - Balance *GoMix*
- Set criteria for Kraft products sold in School vending machines



Collective Action

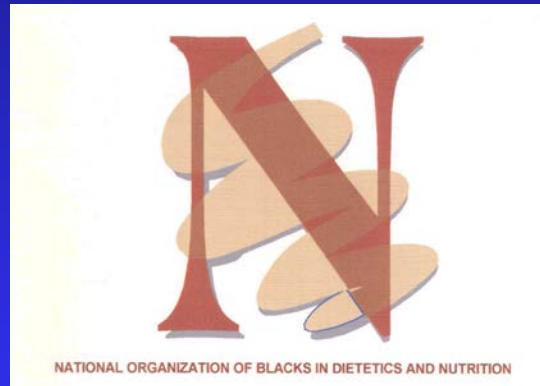


A non-profit organization supported by the food and beverage industry; guided by a distinguished board of authorities in nutrition, health, fitness, education and research; and dedicated to advocating sustainable solutions to achieving a health balance for life.

- **Broad-based**
- **Inclusive**
- **Solutions-focused**

Who Is ACFN?

- 83 Member organizations and growing
- 27 Advisory Board professionals
- 16 Executive Board members



HISPANIC HERITAGE AWARDS FOUNDATION®

ACFN 2004 Program Objectives

- To **serve as a resource** for collaboration among professionals, government and the media
- To **act as an advocate** for lasting initiatives to help solve the obesity problem
- To **promote programs** that are comprehensive, positive and solutions-focused

ACFN 2004 Initiatives

- Serve as a resource

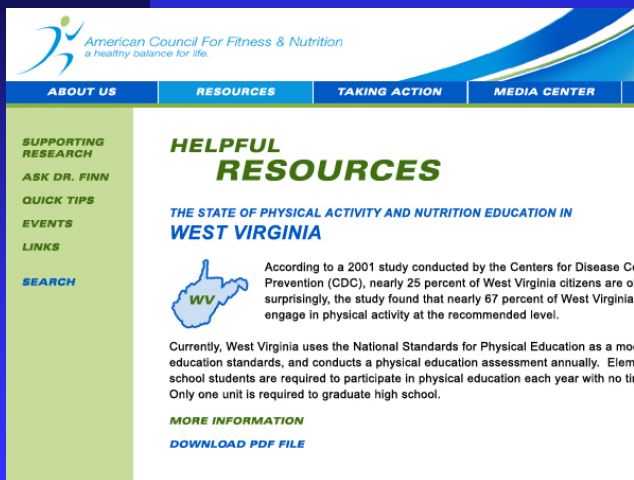
◆ www.acfn.org

◆ Journalist's Notebook

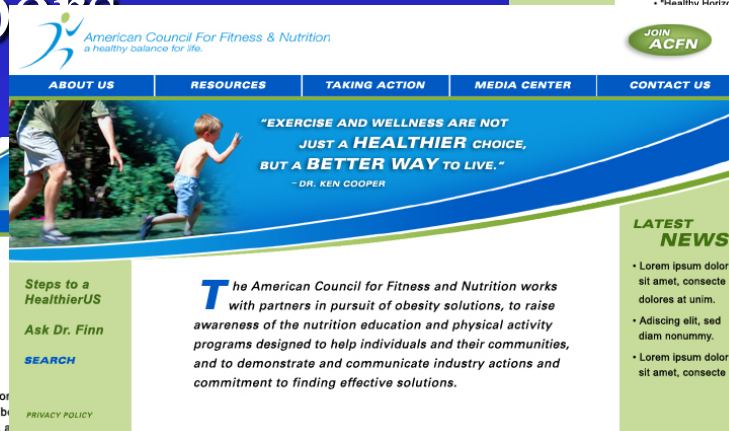
◆ White Papers



The screenshot shows the 'MEDIA CENTER' section of the ACFN website. It features a navigation bar with links: ABOUT US, RESOURCES, TAKING ACTION, MEDIA CENTER, and CONTACT US. On the left, there are links for PRESS RELEASES, IN THE NEWS, TESTIMONY, MEDIA INQUIRIES, and SEARCH. The main content area is titled 'MEDIA CENTER' and contains a section for 'ACFN STATEMENT IN RESPONSE TO JAMA REPORT ON DIET AND INACTIVITY' dated WASHINGTON, D.C., MARCH 9, 2004. The text discusses the importance of physical activity and the role of ACFN in promoting health through energy balance. It also mentions ACFN's advocacy for local, state, and national programs that seek to improve nutrition education and encourage increased physical activity. A list of programs is provided, including 'The nationwide America On the Move™ program', 'The Carol M. White Physical Education for Progress (PEP) grants', and 'Health Horizons'.



The screenshot shows the home page of the American Council for Fitness & Nutrition (ACFN) website. The header includes the ACFN logo and tagline 'a healthy balance for life.' Below the header is a navigation bar with links: ABOUT US, RESOURCES, TAKING ACTION, MEDIA CENTER, and CONTACT US. The main content area is titled 'HELPFUL RESOURCES' and features a section for 'THE STATE OF PHYSICAL ACTIVITY AND NUTRITION EDUCATION IN WEST VIRGINIA'. This section includes a map of West Virginia and text stating that according to a 2001 study conducted by the Centers for Disease Control and Prevention (CDC), nearly 25 percent of West Virginia citizens are obese, and the study found that nearly 67 percent of West Virginia citizens engage in physical activity at the recommended level. The text also mentions that currently, West Virginia uses the National Standards for Physical Education as a model for its physical education standards and conducts a physical education assessment annually. At the bottom, there are links for 'MORE INFORMATION' and 'DOWNLOAD PDF FILE'.



The screenshot shows a banner for the ACFN website with the text 'EXERCISE AND WELLNESS ARE NOT JUST A HEALTHIER CHOICE. BUT A BETTER WAY TO LIVE.' attributed to DR. KEN COOPER. Below the banner is a section titled 'Steps to a HealthierUS' with a link to 'Ask Dr. Finn' and a 'SEARCH' button. To the right, there is a 'LATEST NEWS' section with a list of news items, including 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy, Lorem ipsum dolor sit amet, consectetur'.

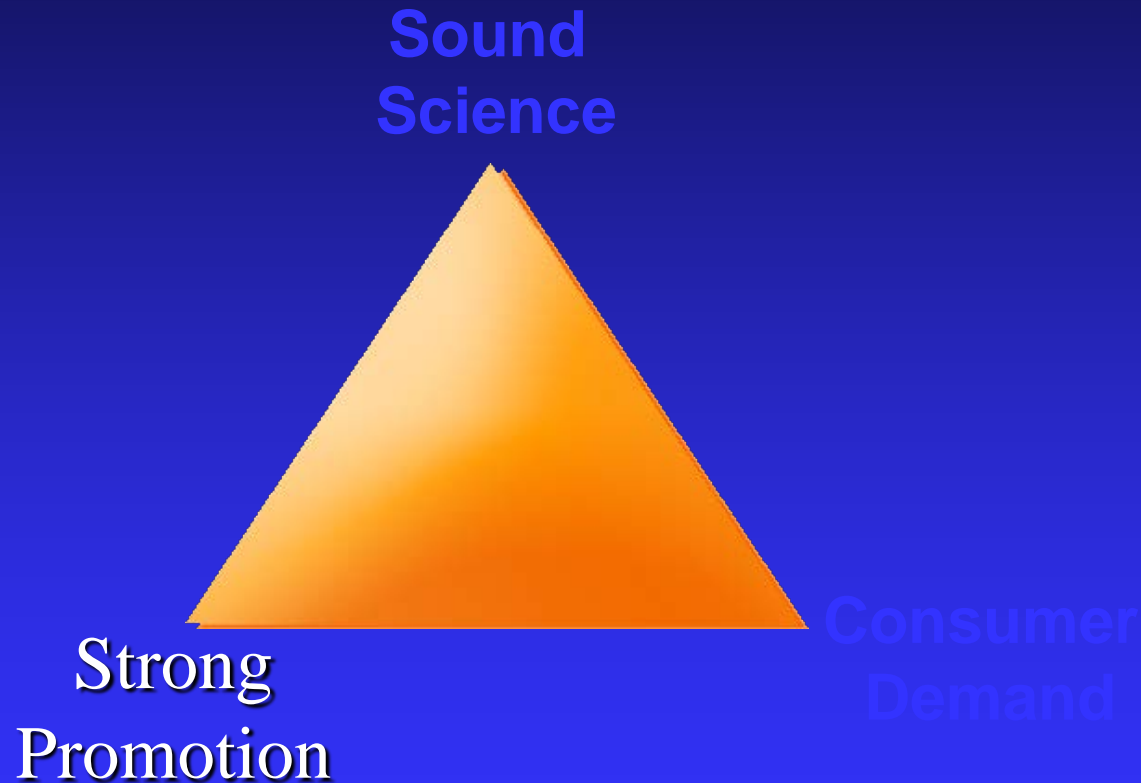
ACFN 2004 Initiatives

- Act as an advocate
 - Support policies that encourage nutrition and physical education in schools
 - Improved Nutrition and Physical Activity Act (IMPACT)
 - Childhood Obesity Prevention Act
 - Physical Education for Progress (PEP) Grants
 - HealthierUS

Outreach to Women

- Comprise 51% of the population.
- Make 75% of all household healthcare decisions.
- Are the primary food shoppers in 75% of households.
- Comprise 70% of pharmacy customers.

What It Takes to Make a Product or Program Successful



What Are the Partnership Opportunities for SNE and ACFN?



Public Health Approach

- **Create public policies that support desired change**
- **People tend to “go with the flow”**

Older Adults

**How are dietary
recommendations used
for older people?**

Older Adults

- **Because most older people have or are at high risk for nutrition-related chronic diseases, they have a tremendous amount to gain from following a “healthy diet.”**

Regular contact with
health professionals

Active
involvement in
determining goals
of intervention

Focus on behavior
modification

Incentives

Messages

Limited in number

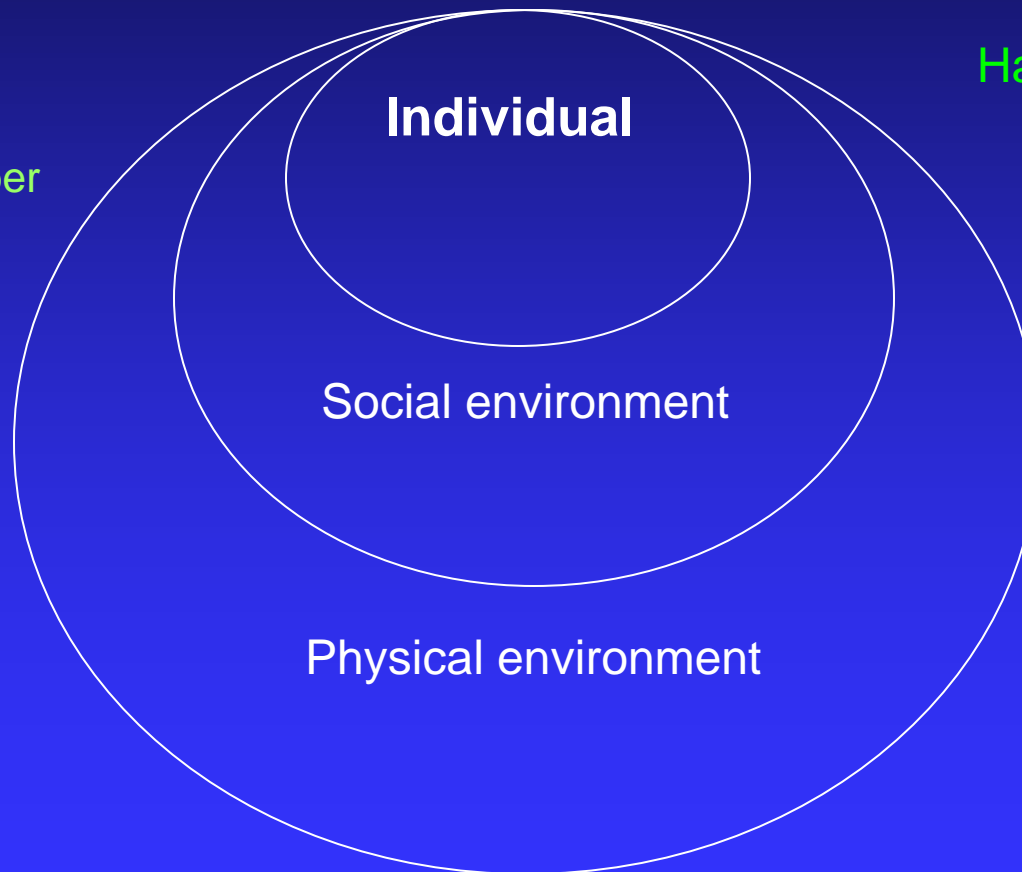
Simple

Targeted

Practical

Reinforced

Hands-on activity



Focus of the talk

- What is the Dietary Guidelines Advisory Committee (DGAC)
 - ◆ Its mandate
 - ◆ How it does its job
- The challenge: Translating dietary guidance
 - ◆ nutrient → food based
 - ◆ Food based → dietary patterns
 - ◆ Examples, fiber and sugar

Overview of how the DGAC does its job

- Five public meetings last one will be August 11, 2004
- Written public comments solicited, reviewed by committee and staff
- Listened to oral public comments
- Workload divided among subcommittees which reported back to the full committee at public meetings
- Each subcommittee assisted by one or more staff.

Overview of how the DGAC does its job

- Science review committee (Janet King, Larry Appel, Joanne Lupton) review all of the committee work for consistency and adherence to science-based standards.
- Consulted outside experts where deemed necessary.
- Requested modeling of food patterns as required.
- Used an evidence-based system to come to conclusive statements on all questions asked.

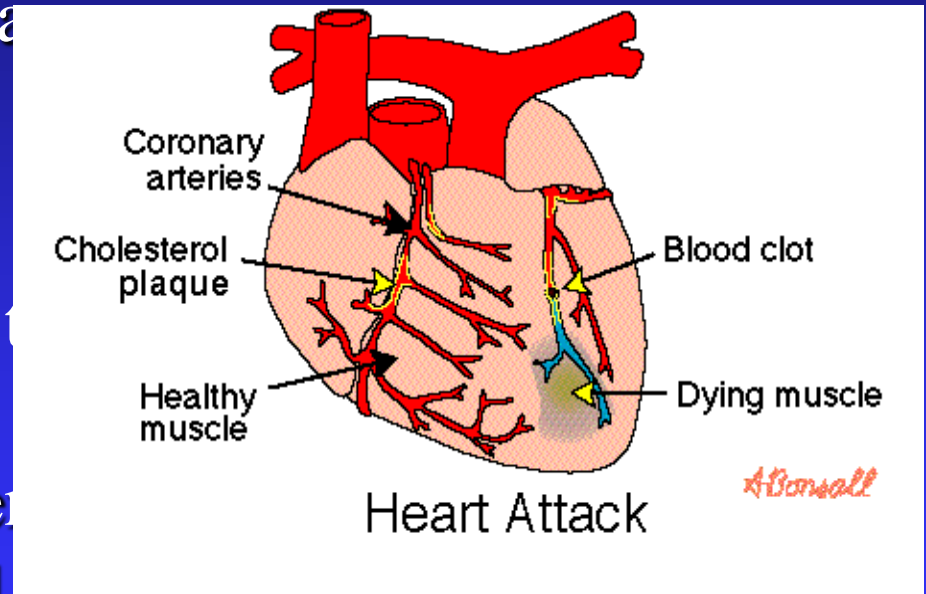
Who uses an evidence-based system?

- Professional organizations that issue evidence-based practice guidelines
 - ◆ American Dietetic Association
 - ◆ American Diabetes Association
 - ◆ American Heart Association

Myers, EF et al. (2001) Evidence guides vs protocols: What's the difference? J Am Diet Assoc 101: 1085-1090.

Two examples of molecules to food patterns (Example #1: fiber)

- There is (for the first time) a DRI value, and an AI, for fiber
 - ◆ 14 g/1000 Kcals
- The AI is based on the strength of the relationship between fiber and decreased risk of CHD



From a DRI to a food-based recommendation

- Major sources include soft drinks, cakes, cookies, pies, fruitades, fruit punch, dairy desserts, and candy.
- There may be a difference in compensation from sugar in beverages vs sugar in solid foods.
- “Added sugars” generally result in added calories.



What FP usually advice Patient

- Avoid sour and cold foods
- Eat eggs and meat
- Drink more water

That's it. Science of diet & Nutrition is over!

